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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/186,450	11/05/1998	ALAN H. KARP	10980759	1805

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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

HO, ANDY

ART UNIT PAPER NUMBER

2194

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/186,450

Applicant(s)

KARP ET AL.

Examiner

Andy Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/4/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed 4/4/2005.
2. Claims 1-35 have been examined and are pending in the application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "Software system" is non-statutory as not being tangibly embodied in a manner so as to be executable. Corrections are required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8, 12-15, 20-26, 30-31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehead U.S Patent No. 6,085,030 in view of Atkinson U.S Patent No. 6,263,379.

As to claim 1, Whitehead teaches a software system (Fig. 2), comprising:

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a set of available resources (software components and services, line 11 column 7);

name space (component registry 250, Fig. 2) which corresponds to a task (component consumer application 210, Fig. 2) executing in the software system, the name space for holding a flexible binding that binds (run-time binding of those components to consumers, line 16 column 7; ...the component registry 250 interoperates with the CMS 280 to, inter alia, determine how to bind the requesting application with an appropriate component..., lines 55-57 column 7) a local name used by the task (an application identity, line 35 column 13; AppID 702, line 49 column 13, Fig. 7) to one or more of the available resources (software components and services, line 11 column 7) using a description of a desired resource (...The description repository 410 ensures consistent interfaces, properties, versions and implementations between components so that all instances of a component type are guaranteed to share the same characteristics. The description repository 410 essentially functions as an initial look up to determine whether the type of the requested component is part of, i.e., registered with, the description repository 410. If the type of the requested component is found in this repository 410, the request is directed to the offer repository 420 where specific instances of that component type are registered. Here, the registered component instances are examined to determine whether they match the requested component and, if so, the object factory repository 430 is accessed..., lines 27-40 column 10);

resource mediator (component management service 280, Fig. 2) that obtains a message from the task (requests for components may be issued by the application directly to the CMS 280 via path 3, lines 31-33 column 7) which contains the local name (applications must have the proper AppID 702 to lookup offers in the CMS, lines 48-49 column 13) and in response the resource mediator identifies a resource handler task (object factory 240, Fig. 2) for handling the message by resolving the local name using the flexible binding (the request is forwarded to the object factory 240 via path 11 to activate an object corresponding to the requested component, lines 12-14 column 8). Whitehead does not explicitly teach a binding type indicator.

Atkinson teaches (line 52 column 10 to line 8 column 11) a system of binding to resource wherein the request for binding uses a moniker to bind to the resource; the moniker contains specific binding method. It would have been obvious to apply the teachings of Atkinson to the system of Whitehead because the binding method of the moniker acts as a binding type indicator wherein the binding method provides the system with necessary information used to bind to the resource as disclosed by Atkinson (line 52 column 10 to line 8 column 11).

As to claim 2, Whitehead as modified further teaches a reference to the resource descriptor in a repository of the software system for the resources (the object factory 240 returns a newly registered offer reference for the requested component to the CMS 280, lines 25-27 column 8; store file-map references to components and store components as binaries in the component registry 350 with location transparency, lines 29-31 column 9).

As to claim 3, it is a system claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above. Whitehead as modified further teaches informing the resource mediator (component management service 280, Fig. 2) to use the references (the object factory 240 returns a newly registered offer reference for the requested component to the CMS 280, lines 25-27 column 8; store file-map references to components and store components as binaries in the component registry 350 with location transparency, lines 29-31 column 9) or description of the desired resource (lines 38-54 column 7).

As to claim 4, Whitehead as modified further teaches the message includes a binding-type indicator that informs the resource mediator (component management service 280, Fig. 2) to use the references (the object factory 240 returns a newly registered offer reference for the requested component to the CMS 280, lines 25-27 column 8; store file-map references to components and store components as binaries in the component registry 350 with location transparency, lines 29-31 column 9) or description of the desired resource (lines 38-54 column 7).

As to claim 5, Whitehead as modified further teaches the binding-type indicator causes the resource mediator to use a tight binding when resolving the local name such that the resource mediator uses the references to resolve the local name (run-time binding of those components to consumers, line 16 column 7; ... the component registry 250 interoperates with the CMS 280 to, inter alia, determine how to bind the requesting application with an appropriate component..., lines 55-57 column 7; the object factory 240 returns a newly registered offer reference for the requested component to the CMS

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280, lines 25-27 column 8; store file-map references to components and store components as binaries in the component registry 350 with location transparency, lines 29-31 column 9).

As to claim 6, it is a system claim of claims 1, 3 and 5. Therefore, it is rejected for the same reasons as claims 1, 3 and 5 above.

As to claim 7, Whitehead as modified further teaches the binding-type indicator causes the resource mediator to use a flexible binding when resolving the local name by searching the repository for a resource descriptor having a set of attributes that match description of the desired resource (lines 38-54 column 7; run-time binding of those components to consumers, line 16 column 7; ...the component registry 250 interoperates with the CMS 280 to, inter alia, determine how to bind the requesting application with an appropriate component..., lines 55-57 column 7; the object factory 240 returns a newly registered offer reference for the requested component to the CMS 280, lines 25-27 column 8; store file-map references to components and store components as binaries in the component registry 350 with location transparency, lines 29-31 column 9).

As to claim 8, Whitehead as modified further teaches the binding-type indicator causes the resource mediator to use a flexible binding to update the references (object factory 240 returns a newly registered offer reference for the requested component to the CMS 280, lines 22-24 column 8).

As to claim 12, Whitehead as modified further teaches the message (requests for components may be issued by the application directly to the CMS 280 via path 3,

lines 31-33 column 7) includes a primary resource field that holds the local name for the desired resource and a set of additional resource fields each of which holds a local name that the task uses to refer to an additional resource (lines 33-54 column 13).

As to claim 13, Whitehead as modified further teaches primary resource field and each additional resource field includes a field for holding a local name (lines 7-20 column 9).

As to claim 14, Whitehead as modified further teaches the resource handler (object factory 240, Fig. 2) uses a default name space associated with the task to resolve the local names in the primary resource and additional resource fields (lines 15-27 column 8).

As to claim 15, it is a system claim of claims 4 and 12. Therefore, it is rejected for the same reasons as claims 4 and 12 above.

As to claim 20, it is a system claim of claim 12. Therefore, it is rejected for the same reasons as claim 12 above.

As to claim 21, it is a system claim of claims 16 and 20. Therefore, it is rejected for the same reasons as claims 16 and 20 above.

As to claim 22, it is a method claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

As to claim 23, it is a method claim of claims 2 and 6. Therefore, it is rejected for the same reasons as claims 2 and 6 above.

As to claim 24, it is a method claim of claims 1 and 2. Therefore, it is rejected for the same reasons as claims 1 and 2 above.

As to claim 25, it is a method claim of claim 7. Therefore, it is rejected for the same reasons as claim 7 above.

As to claim 26, it is a method claim of claims 7-8. Therefore, it is rejected for the same reasons as claims 7-8 above.

As to claims 30-31, they are method claims of claims 12 and 14, respectively. Therefore, they are rejected for the same reasons as claims 12 and 14 above.

As to claim 35, it is a method claim of claims 2 and 5-6. Therefore, it is rejected for the same reasons as claims 2 and 5-6 above.

5. Claims 9 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehead in view of Atkinson, and further in view of Nomura U.S Patent No. 5,790,853.

As to claim 9, Whitehead as modified does not explicitly teach removing any of the references that correspond to resources that are not currently available. Nomura teaches a resource state change section (112, Fig. 45) where a resource reference can be changed, added, or deleted (line 43-47 column 24). It would have been obvious to apply the teachings of Nomura to the system of Whitehead as modified because once the resource is not currently available doing the processing; its reference is no longer needed and can be removed; therefore freeing up the memory space as disclosed by Nomura (lines 13-47 column 24).

As to claim 27, it is a method claim of claim 9. Therefore, it is rejected for the same reasons as claim 9 above.

6. Claims 10-11, 16-19, 28-29 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehead in view of Atkinson, and further in view of Ji U.S. Patent No. 5,623,600.

As to claim 10, Whitehead as modified does not explicitly teach the resource mediator enables the task to transfer the flexible binding to another task. Ji teaches task to transfer (transfer, line 46 column 7) the flexible binding (commands, line 47 column 7) to another task (server task, line 47 column 7) in the software system. It would have been obvious to apply the teachings of Ji to the system of Whitehead as modified because this allows the resource mediator to transfer the binding from the first task to the second task to avoid name conflicts as disclosed by Ji (line 29-65 column 7).

As to claim 11, Ji further teaches task to transfer (transfer, line 46 column 7) the flexible binding (commands, line 47 column 7) to another task (server task, line 47 column 7) in the software system along (including, line 48 column 7) with a set of additional flexible bindings (binding, line 48 column 7).

As to claim 16, Ji further teaches the flexible binding is a partial binding (806, and 808, Fig. 8A) that includes a reference (spawn SMTP daemon, 808 Fig. 8A) to a resource descriptor for a resource associated with a task (812, Fig. 8A) that will complete the partial binding (800, and 818, Fig 8A).

As to claim 17, it is a system claim of claim 10. Therefore, it is rejected for the same reasons as claim 10 above.

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As to claim 18, it is a system claim of claim 10. Therefore, it is rejected for the same reasons as claim 10 above. Moreover, Ji further teaches the task to transfer the partial binding to another task in another software system (transferring data out of the protected domain of the network, line 32-33 column 7).

As to claim 19, Whitehead as modified further teaches the name space (component registry 250, Fig. 2) is arranged as a structured name space with an ordered list of frames (repository components within component registry 250, Fig. 2).

As to claims 28-29, they are method claims of claims 10-11, respectively. Therefore, they are rejected for the same reasons as claims 10-11 above.

As to claims 32-34, they are method claims of claims 16-18, respectively. Therefore, they are rejected for the same reasons as claims 16-18 above.

Response to Arguments

7. Applicant's arguments filed 4/4/2005 have been fully considered but are moot in view of the new ground(s) rejection.

Applicant's arguments presented issues which required the Examiner to further view the previous rejection. The Examiner conducted a further search regarding the issues mentioned in Applicant's response. Therefore, all arguments regarding the cited references of the previous rejection are moot in view of the new grounds of rejection.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Any response to this action should be mailed to:

Commissioner for Patents

P.O Box 1450


Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (703) 872 - 9306.
- OFFICAL faxes must be signed and sent to (703) 872 - 9306.
- NON OFFICAL faxes should not be signed, please send to (571) 273 – 3762

A.H

June 23, 2005



ST. JOHN COURTENAY III
PRIMARY EXAMINER